

Grease and tree roots can block pipes and cause overflows.

Help Us Protect Our Sewer System and Environment

- Report suspected sewage spills by telephoning our 24-hour Wastewater Collection Team at 704-357-6064.
- Don't pour grease down any drain!
- Freeze animal fats in a can and dispose of in a trash receptacle.
- Mix liquid vegetable fats with an absorbent material, such as cat litter or coffee grounds, and place in a lidded container and dispose of in a trash receptacle.

Defeat the

Where can I get the full report?

The complete 2003 Wastewater Performance Report - roughly 30 pages long - can be obtained at www.cmutilities.com or by calling the City-County Customer Service & Information Center at 704-336-7600.



Crews regularly clean pipes to clear blockages and prevent overflows.

PROTECTING OUR ENVIRONMENT



WASTEWATER PERFORMANCE
Annual Report 2003



PROTECTING OUR ENVIRONMENT

Annual Report

This is an annual report of the Charlotte-Mecklenburg Utilities wastewater system performance during the fiscal year that runs from July 1, 2002 through June 30, 2003. It provides our customers with a brief overview of highlights and challenges for the year, plus tips on ways the public can help us protect the environment by preventing wastewater overflows.

Challenges



This past year presented many challenges for our wastewater collection system. Following three years where the number of sewer spills generally was in decline, our system experienced a sharp increase in fiscal year 2003. The ongoing problem of grease and tree roots - coupled with this year's heavy rainfall - led to most of the 538 spills that occurred from our wastewater network. While sanitary sewer systems are not designed to carry stormwater, excess water seeped into parts of the pipe system due to runoff and flooding from numerous heavy rain events. The extra water sometimes overwhelmed parts of our pipe collection system and sent very heavy flows to our five treatment plants.

Despite these challenges it is important to note that our plants managed the excess flows very well and maintained high water quality standards during the treatment process. It is also noteworthy that our collection system successfully delivered 99.93 percent of this community's 31.64 *billion* gallons of wastewater during the past year.

Highlights

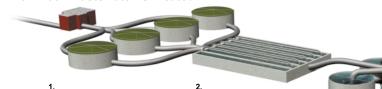


Charlotte-Mecklenburg Utilities celebrated some important milestones even as it took numerous actions to prevent overflows and protect water quality through effective wastewater treatment.

- Restored / replaced 6.75 miles of sewer pipe.
- Cleaned 624 miles in our 3,210-mile sewer
- network, including repeat cleanings.
- Continued to upgrade and enhance wastewater collection & treatment performance.
- In its third year, the Oil & Grease Prevention Program inspected grease-handling facilities at 375 restaurants to ensure compliance with city sewer use ordinance and protect the sewer system from improper grease disposal.
- All five Charlotte-Mecklenburg Utilities wastewater treatment plants received Peak Performance Awards from the Association of Metropolitan Sewerage Agencies (AMSA) for the calendar year ending 2002.
- Utilities commenced a comprehensive study of overflows led by a nationally recognized consultant.

Where does our wastewater go?

Charlotte-Mecklenburg Utilities serves all of Mecklenburg County, providing wastewater services to more than 700,000 customers. An average of 86 million gallons of wastewater is collected daily through a 3,210-mile pipe network. Wastewater flows by gravity to one of five wastewater treatment plants — McAlpine Creek, Sugar Creek, Irwin Creek, Mallard Creek & McDowell Creek. State-certified operators staff each plant 24 hours a day, 365 days per year to ensure wastewater is safely treated and discharged back into the environment. Solids removed during treatment are safely recycled as part of a land application program.



Primary Treatment

Solid particles & objects are captured in grit screens and primary clarifiers.

How Your Wastewater is Treated

2. Aeration/Secondary Treatment

Wastewater is aerated to support growth of microorganisms that remove harmful pollutants. **Advanced Treatment** Wastewater flows through sand filters to remove fine particles.

h Water is disinfected to
e remove any remaining
pathogens, then disinfectant is removed and the
water is released back into
creeks to flow downstream.

Disinfection

Clarification

Solids and microorganisms settle out in large basins.